

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/085457 A3

(51) International Patent Classification:
C12N 15/62 (2006.01) A61K 47/48 (2006.01)
C12N 15/87 (2006.01)

(21) International Application Number:
PCT/GB2005/000811

(22) International Filing Date: 3 March 2005 (03.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0404731.2 3 March 2004 (03.03.2004) GB

(71) Applicant (for all designated States except US): UNIVER-
SITY OF LEEDS [GB/GB]; Leeds LS2 9JT (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): COLYER, John
[GB/GB]; School of Biochemistry and Molecular Biology,
University of Leeds, Leeds LS2 9JT (GB). BHOGAL,
Moninder, Singh [GB/GB]; University of Leeds, Leeds
LS2 9JT (GB).

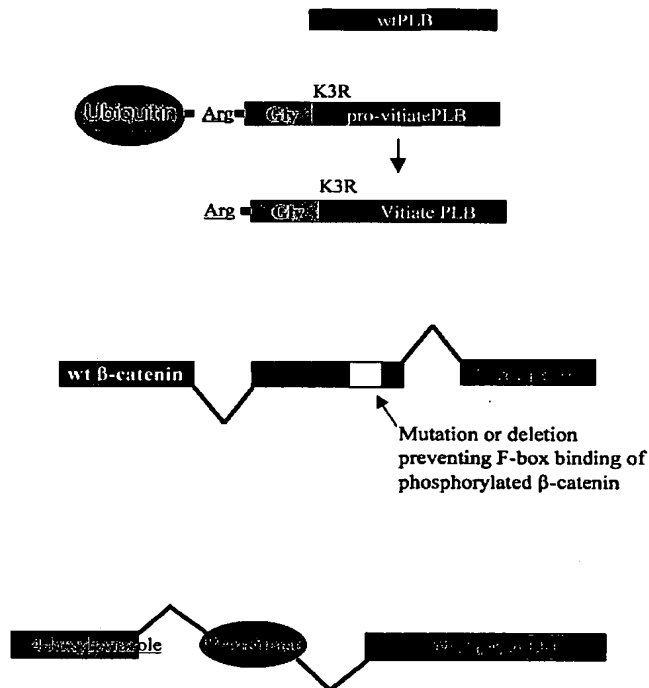
(74) Agent: HARRISON GODDARD FOOTE; Belgrave
Hall, Belgrave Street, Leeds LS2 8DD (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND PRODUCTS FOR THE SELECTIVE DEGRADATION OF PROTEINS



(57) Abstract: The present invention provides a method of controlling levels/concentrations of a target moiety.. The method of the present invention includes introducing into a cell a product comprising at least one of each of the following modules: a targeting module, a destruction module and a replacement module. The method further comprises targeting the target moiety with the targeting module so that the destruction module can effect degradation of the target moiety and replacing the target moiety with a replacement module. The replacement module may be either a modified form of the target moiety itself or a functional unit which restores normal metabolic activity of the cell. The present invention also provides products comprising targeting modules, a destruction module and a replacement module, nucleic acids encoding the products and vectors. The present invention also provides for use of the method and products in treating various clinical disorders.

WO 2005/085457 A3



Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report*

(88) Date of publication of the international search report:

18 May 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.